

Amendment submitted in response
to Office Action mailed 12/15/2004
U.S. Pat App. No. 10/720,839
4/15/2005
Page 9

REMARKS/ARGUMENTS

The Examiner is thanked for allowance of Claim 49.

In the Office Action mailed 12/15/2004, Claims 1-4, 9-11, 13-28, 33-35, 37-48 were rejected under 35 U.S.C. 103(a) as being unpatentable over US 6191399 B1 (Van Bilsen; Frank B. M., herein after VAN BILSEN) in view of US 5225245 A (Ohta; Tomohiro et al., hereinafter OHTA). Applicant has modified the claims in accordance with the Examiner's suggestions.

Prior Art Rejections – 35 USC §103

A rejection under 35 USC §103 requires that the combined references suggest the claimed combination. (MPEP 706 and 2141 et seq.).

Claim 1 is indicative of the independent claims and recites:

In a plasma processing system, a method of determining the temperature of a substrate, comprising:

positioning said substrate on a substrate support structure, wherein said substrate support structure includes a chuck;

creating a temperature calibration curve for said substrate, said temperature calibration curve being created by measuring at least a first substrate temperature with an electromagnetic measuring device, and measuring a first chuck temperature with a physical measuring device in thermal contact with said chuck during a first isothermal state of said substrate, in the absence of a plasma in said plasma processing system;

employing a measurement from said electromagnetic measurement device and said temperature calibration curve to determine a temperature of said substrate during plasma processing, wherein said plasma is generated in said plasma processing system.

In particular, cited references fail to teach the measurement of a substrate during an isothermal state, in the absence of a plasma or a decomposing source gas. In both VAN BILSEN and OHTA, a temperature is sensed or measured in the presence of a plasma or a decomposing

Amendment submitted in response
to Office Action mailed 12/15/2004
U.S. Pat App. No. 10/720,839
4/15/2005
Page 10

source gas. Applicant submits that since the independent claims are not taught or suggested by the references, that the dependent claims are also allowable over the references.

Conclusion

In view of the discussion herein, Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at 408-257-5500.

Enclosed herewith is a credit card payment form in the amount of \$120 to cover the one month extension. Applicant believes there are no additional fees due to process this Response. However, if the Commissioner finds otherwise, Commission is hereby authorized to charge any such additional fees to process this Response, or to credit any over-payments that may apply, to our Deposit Account No. 50-2284 (Order No. LMRX-P028).

Respectfully submitted,

/Alex Sousa/

Alexander Sousa
Registration No. 50,671

Tel: 408-257-5500